



## Bombas Acero Inoxidable AISI 304 - Rodete Noryl Stainless Steel Pumps AISI 304 - Noryl Impeller

50Hz

4F

### BOMBA 4F

Caudales hasta 21 m<sup>3</sup>/h a 2850rpm

Altura manométrica hasta 475m a 2850rpm

Impulsiones de 1" ¼ y 2"

Ensayos de acuerdo con norma ISO 9906

### 4F PUMP

• Capacity up to 21m<sup>3</sup>/h for 2850rpm

• Head up to 475m for 2850rpm

• Outlet 1" ¼ and 2"

• Test according ISO 9906

### MOTORES SUMERGIBLES EMC

Motores Sumergibles Encapsulados EMC de 4" hasta 10 CV

Tensión Monof. hasta 3CV 220/230V - 50Hz - Tolerancia ±10%

Tensión Trifásica 400V - 50Hz - Tolerancia ±10%

Protección IP 68 - Clase de Aislamiento Tipo F

Temp. máx. del agua 30°C

Instalación en Vertical y en Horizontal

Arranque máximos por hora 20

Velocidad mínima de refrigeración hasta 10 CV: 0.2 m/s

Acoplamiento NEMA

### EMC SUBMERSIBLE MOTORS

• 4" Encapsulated Submersible Motors EMC up to 10 CV

• Single-phase Voltage up to 3 CV 220/230V - 50Hz - ±10% Tolerance

• Triphase Voltage 400V - 50Hz - ±10% Tolerance

• IP 68 - Isolament F type

• Water Maximum Temperatura 30°C

• The motor can operate vertically and horizontally

• Maximum start/hour 20

• Minimum cooling water speed up to 10 CV: 0.2 m/s

• NEMA coupling

### CARACTERÍSTICAS

Bomba sumergible centrífuga multicelular con turbinas radiales

Turbinas en Noryl con elementos antidesgaste en inox AISI 304

Difusores en Noryl con elementos antidesgaste en inox AISI 304

Exterior de la bomba en acero inoxidable AISI 304

Cuerpo impulsión con válvula incorporada

Cuerpo impulsión en acero inoxidable AISI 304

Cuerpo de aspiración, rejilla y tirantes en inoxidable AISI 304

Protección del cable en acero inoxidable AISI 304

Eje de bomba en acero inoxidable AISI 316

Acoplamiento norma NEMA

### CHARACTERISTICS

• Submersible centrifugal pump with radial impellers

• Noryl impellers with rotations parts in AISI 304

• Noryl diffusers with rotations parts in AISI 304

• Pump outside in Stainless Steel AISI 304

• Discharge Case with valve-check

• Discharge Case in Stainless Steel AISI 304

• Suction Case and Filter in AISI 304

• Cable guard in AISI 304

• Shaft Pumps in Stainless Steel AISI 316

• NEMA coupling

### APLICACIONES

Bombas para aplicación en abastecimientos de agua, riego, sistemas de presión.

### APPLICATIONS

• Domestic water supply, irrigation, spraying watering, sprinkling and pressurization systems.

# Bombas Acero Inoxidable AISI 304 - Rodete Noryl

## Stainless Steel Pumps AISI 304 - Noryl Impeller

50Hz

4F 48

### Características 50Hz • Performance 50Hz

| Bomba<br>Pump | Motor |     | Q                      | Caudal • Capacity |        |        |     |        |        |      |        |
|---------------|-------|-----|------------------------|-------------------|--------|--------|-----|--------|--------|------|--------|
|               |       |     | l/s                    | 0                 | 0,6667 | 1,3333 | 2   | 2,3333 | 2,6667 | 3    | 3,3333 |
|               |       |     | m <sup>3</sup> /h      | 0                 | 2,4    | 4,8    | 7,2 | 8,4    | 9,6    | 10,8 | 12,0   |
|               | kW    | HP  | l/min                  | 0                 | 40     | 80     | 120 | 140    | 160    | 180  | 200    |
| 48-04F        | 0,75  | 1   | Altura • Head<br>H (m) | 27                | 26     | 25     | 22  | 19     | 16     | 13   | 8      |
| 48-07F        | 1,1   | 1,5 |                        | 47                | 46     | 44     | 38  | 33     | 28     | 22   | 15     |
| 48-09F        | 1,5   | 2   |                        | 61                | 59     | 56     | 49  | 43     | 36     | 29   | 19     |
| 48-13F        | 2     | 3   |                        | 88                | 85     | 81     | 70  | 62     | 53     | 41   | 27     |
| 48-17F        | 3     | 4   |                        | 115               | 112    | 106    | 92  | 81     | 69     | 54   | 36     |
| 48-23F        | 4     | 5,5 |                        | 156               | 151    | 143    | 124 | 110    | 93     | 73   | 48     |
| 48-31F        | 5,5   | 7,5 |                        | 210               | 204    | 193    | 168 | 148    | 125    | 98   | 65     |
| 48-42F        | 7,5   | 10  |                        | 284               | 276    | 262    | 227 | 200    | 170    | 133  | 88     |

### Información Técnica Motor Sumergible • Technical Information Sumersible

| Bomba<br>Pump                         | Potencia<br>Power |     | Tipo Motor<br>Motor Type | U <sub>N</sub> | Información Motor • Motor information |                |                |      |       |                    |      |     |       |     |    |
|---------------------------------------|-------------------|-----|--------------------------|----------------|---------------------------------------|----------------|----------------|------|-------|--------------------|------|-----|-------|-----|----|
|                                       |                   |     |                          |                | n                                     | I <sub>N</sub> | I <sub>A</sub> | η    | cos φ | Ax.                | P    | L   | Cable |     | μF |
|                                       | min <sup>-1</sup> | (A) |                          |                | kN                                    | (kg)           | (mm)           |      |       | (mm <sup>2</sup> ) | (m)  |     |       |     |    |
| Motor Monofásico • Single Phase Motor |                   |     |                          |                |                                       |                |                |      |       |                    |      |     |       |     |    |
| 48-04F                                | 0,75              | 1   | EMC/4 1                  | 400 V          | 2840                                  | 6,2            | 20,0           | 0,64 | 0,90  | 2                  | 8,8  | 380 | 1,5   | 1,7 | 25 |
| 48-07F                                | 1,1               | 1,5 | EMC/4 1,5                |                | 2850                                  | 8,1            | 32,0           | 0,68 | 0,90  | 2                  | 10,0 | 405 | 1,5   | 1,7 | 35 |
| 48-09F                                | 1,5               | 2   | EMC/4 2                  |                | 2850                                  | 10,4           | 38,0           | 0,73 | 0,90  | 2                  | 11,5 | 440 | 1,5   | 1,7 | 40 |
| 48-13F                                | 2                 | 3   | EMC/4 3                  |                | 2820                                  | 15,0           | 46,0           | 0,72 | 0,88  | 3                  | 14,0 | 495 | 1,5   | 2,5 | 55 |
| Motor Trifásico • Three Phase motor   |                   |     |                          |                |                                       |                |                |      |       |                    |      |     |       |     |    |
| 48-04F                                | 0,75              | 1   | EMC/4 1                  | 400 V          | 2830                                  | 2,3            | 8,9            | 0,66 | 0,78  | 2                  | 8,2  | 365 | 1,5   | 1,7 | -  |
| 48-07F                                | 1,1               | 1,5 | EMC/4 1,5                |                | 2840                                  | 3,1            | 12,0           | 0,70 | 0,84  | 2                  | 8,9  | 380 | 1,5   | 1,7 | -  |
| 48-09F                                | 1,5               | 2   | EMC/4 2                  |                | 2840                                  | 4,0            | 14,0           | 0,72 | 0,84  | 2                  | 10,0 | 405 | 1,5   | 1,7 | -  |
| 48-13F                                | 2                 | 3   | EMC/4 3                  |                | 2840                                  | 5,6            | 22,0           | 0,71 | 0,83  | 3                  | 11,6 | 440 | 1,5   | 2,5 | -  |
| 48-17F                                | 3                 | 4   | EMC/4 4                  |                | 2850                                  | 7,4            | 43,0           | 0,73 | 0,80  | 5                  | 15,2 | 516 | 1,5   | 2,5 | -  |
| 48-23F                                | 4                 | 5,5 | EMC/4 5,5                |                | 2855                                  | 9,8            | 49,0           | 0,75 | 0,80  | 5                  | 19,5 | 607 | 1,5   | 2,5 | -  |
| 48-31F                                | 5,5               | 7,5 | EMC/4 7,5                |                | 2850                                  | 13,7           | 65,0           | 0,75 | 0,80  | 5                  | 23,1 | 683 | 1,5   | 2,5 | -  |
| 48-42F                                | 7,5               | 10  | EMC/4 10                 |                | 2850                                  | 18,7           | 87,0           | 0,76 | 0,80  | 5                  | 27,5 | 783 | 1,5   | 2,5 | -  |

Más información en fichas técnicas motores sumergibles EMC • More information in technicals specifications of sumersible motors EMC

### Características de Fabricación • Manufacturing Characteristics

Cuerpo • Body

Rodete y Difusores • Impeller and Difussers

Eje Bomba • Pump shaft

Rejilla • Strainer

Protección cable • Cable guard

Válvula • Valve cap

Acero Inoxidable (AISI 304) • Stainless steel (AISI 304)

Noryl • Noryl

Acero Inoxidable AISI 316 • Stainless Steel AISI 316

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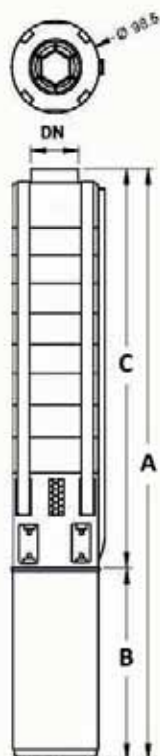
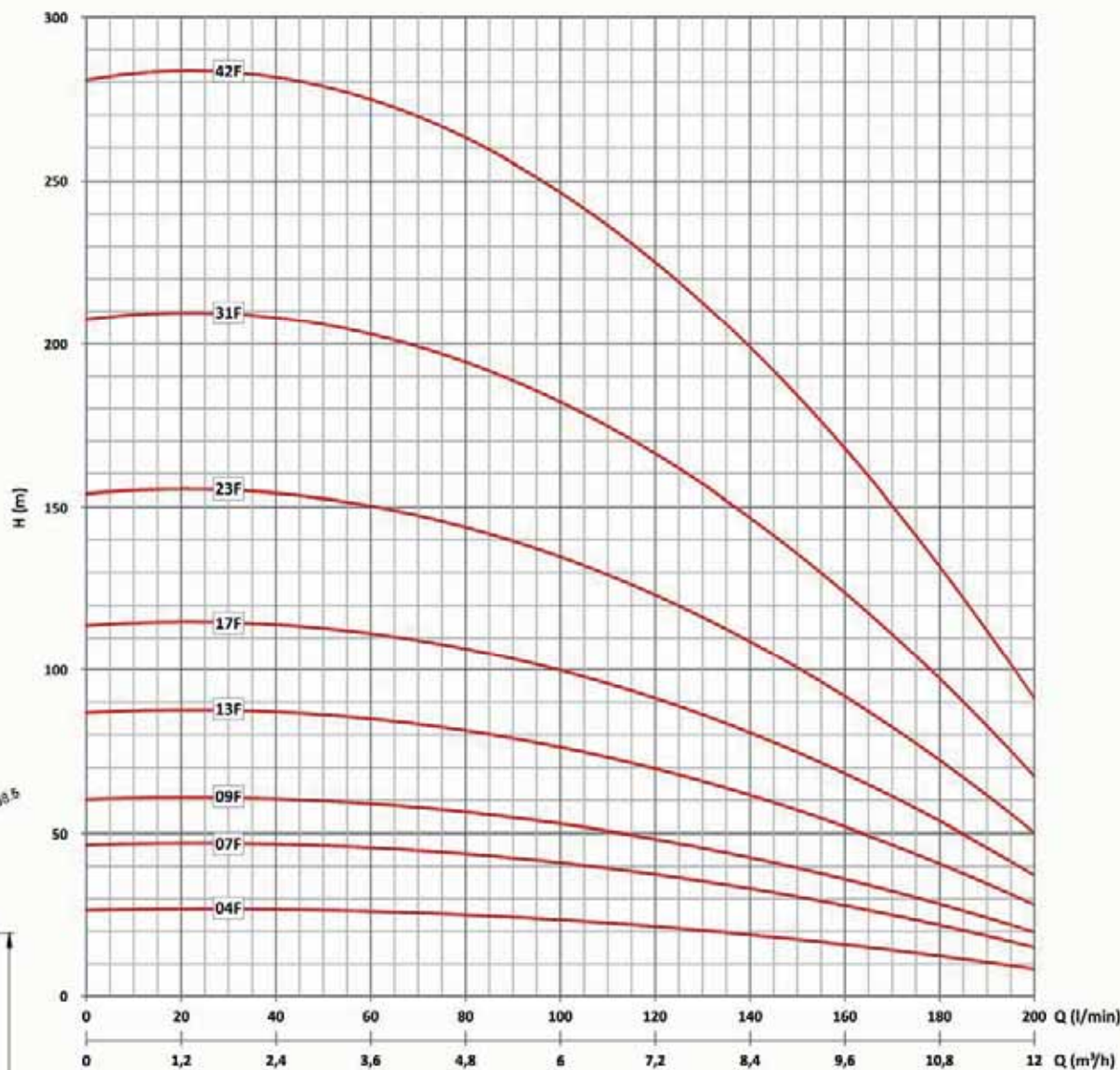
50Hz

# Bombas Acero Inoxidable AISI 304 - Rodete Noryl

## Stainless Steel Pumps AISI 304 - Noryl Impeller

# 4F 48

### Características 50Hz • Performance 50Hz



### Dimensiones y Pesos • Dimensions and Weights

| Dimensiones y peso de la bomba • Pump weight and dimensions |                                       |      |     |      |             |                                     |        |      |     |      |             |     |
|-------------------------------------------------------------|---------------------------------------|------|-----|------|-------------|-------------------------------------|--------|------|-----|------|-------------|-----|
| Tipo<br>Type                                                | Motor Monofásico • Single Phase Motor |      |     |      |             | Motor Trifásico • Three Phase motor |        |      |     |      |             | DNM |
|                                                             | IN (A)                                | C    | B   | A    | Peso        | IN (A)                              | IN (A) | C    | B   | A    | Peso        |     |
|                                                             | 230V                                  | (mm) |     |      | Weight (kg) | 230V                                | 400V   | (mm) |     |      | Weight (kg) |     |
| 48-04F                                                      | 6,2                                   | 358  | 380 | 738  | 2,6         | 3,6                                 | 2,3    | 358  | 365 | 723  | 2,6         | 2"  |
| 48-07F                                                      | 8,1                                   | 448  | 405 | 853  | 3,3         | 5,2                                 | 3,1    | 448  | 380 | 828  | 3,3         |     |
| 48-09F                                                      | 10,4                                  | 508  | 440 | 948  | 3,9         | 6,8                                 | 4      | 508  | 405 | 913  | 3,9         |     |
| 48-13F                                                      | 15                                    | 669  | 495 | 1164 | 4,3         | 10                                  | 5,6    | 669  | 440 | 1109 | 4,3         |     |
| 48-17F                                                      | -                                     | 789  | -   | -    | 6,3         | 12,9                                | 7,4    | 789  | 516 | 1305 | 6,3         |     |
| 48-23F                                                      | -                                     | 1010 | -   | -    | 8,2         | 17,1                                | 9,8    | 1010 | 607 | 1617 | 8,2         |     |
| 48-31F                                                      | -                                     | 1291 | -   | -    | 10,7        | 23,7                                | 13,7   | 1291 | 683 | 1974 | 10,7        |     |
| 48-42F                                                      | -                                     | 1662 | -   | -    | 14,2        | 31,2                                | 18,7   | 1662 | 783 | 2445 | 14,2        |     |

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Las condiciones de trabajo han sido tomadas en las siguientes condiciones: agua 15°C, presión atmosférica de 1 bar y densidad específica 1gr/cm³ según ISO 9906 Annex A.  
The hydraulic working characteristics have been taken with water at: 15°C, at the atmospheric pressure of 1 bar and specific gravity is 1gr/cm³. ISO 9906 Annex A.